

Please type a plus sign (+) inside this box → ☒

Approved for use through 09/30/2000. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL <i>(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))</i>	Attorney Docket No.	ORCL5628
	First Inventor or Application Identifier	JOHNSON, Richard C.
	Title	eDropship: Methods And Systems For Anonymous eCommerce Shipment
	Express Mail Label No.	EL 426 709 668 US

APPLICATION ELEMENTS <i>See MPEP chapter 600 concerning utility patent application contents.</i>	ADDRESS TO: Assistant Commissioner for Patents Box Patent Application Washington, DC 20231
--	---

1. <input checked="" type="checkbox"/> * Fee Transmittal Form (e.g., PTO/SB/17) <i>(Submit an original and a duplicate for fee processing)</i> 2. <input checked="" type="checkbox"/> Specification [Total Pages 26] - Descriptive title of the Invention - Cross References to Related Applications - Statement Regarding Fed sponsored R & D - Reference to Microfiche Appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure 3. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets 3] 4. Oath or Declaration [Total Pages] a. <input checked="" type="checkbox"/> Newly executed (original or copy) b. <input type="checkbox"/> Copy from a prior application (37 C.F.R. § 1.63(d)) i. <input type="checkbox"/> DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).	5. <input type="checkbox"/> Microfiche Computer Program (Appendix) 6. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. <input type="checkbox"/> Computer Readable Copy b. <input type="checkbox"/> Paper Copy (identical to computer copy) c. <input type="checkbox"/> Statement verifying identity of above copies
---	---

*** NOTE FOR ITEMS 1 & 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).**

ACCOMPANYING APPLICATION PARTS	
7. <input checked="" type="checkbox"/> Assignment Papers (cover sheet & document(s)) 8. <input checked="" type="checkbox"/> 37 C.F.R. § 3.73(b) Statement (when there is an assignee) <input checked="" type="checkbox"/> Power of Attorney 9. <input type="checkbox"/> English Translation Document (if applicable) 10. <input checked="" type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input checked="" type="checkbox"/> Copies of IDS Citations 11. <input type="checkbox"/> Preliminary Amendment 12. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 13. <input type="checkbox"/> * Small Entity Statement filed in prior application, Status still proper and desired (PTO/SB/09-12) 14. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed) 15. <input type="checkbox"/> Other:	135 U.S. PTO 09/490783 01/24/00

16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: _____

Prior application information: Examiner: _____ Group / Art Unit: _____

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

17. CORRESPONDENCE ADDRESS					
<input checked="" type="checkbox"/> Customer Number or Bar Code Label			<input checked="" type="checkbox"/> Correspondence address below		
(Insert Customer No. or Attach bar code label here)			022430		
Name	YOUNG LAW FIRM, P.C.				
	Alan W. Young, Esq.				
Address	4370 Alpine Road				
City	Portola Valley	State	CA	Zip Code	94028
Country	USA	Telephone	(650) 851-7210	Fax	(650) 851-7232

Name (Print/Type)	Alan W. Young	Registration No. (Attorney/Agent)	37,970
Signature	<i>Alan W. Young</i>	Date	Jan 24, 2000

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

5

**eDROPSHIP:
METHODS AND SYSTEMS FOR
ANONYMOUS eCOMMERCE
SHIPMENT**

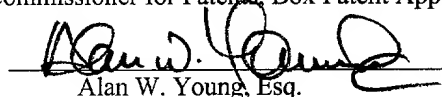
0

Inventor: RICHARD C. JOHNSON
Assignee: ORACLE CORPORATION

5

Young Law Firm, P.C.
4370 Alpine Road, Suite 106
Portola Valley, CA 94028
Tel: (650) 851-7210
Fax: (650) 851-7232

I hereby certify that this patent application is being deposited with the United States Postal Service as Express Mail No. EL426709668US, in an envelope addressed to: Assistant Commissioner for Patents, Box Patent Application, Washington, D.C., 20231, Box: Patent Application on January 24, 2000.

 Jan 24, 2000
Alan W. Young, Esq. Date

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to the safeguarding of personal information in electronic commerce transactions. More particularly, the present invention addresses the privacy concerns of consumers in the electronic marketplace by limiting access to package delivery information.

2. Description of the Related Art

The advent of electronic commerce over the Internet has spurred economic development by fostering new products and industries and revitalizing old ones. Electronic commerce has also brought an unprecedented array of choices to consumers, who now can make purchases without regard to geographical or political boundaries. However, the increasingly global interconnectivity making such electronic commerce possible is fraught with potential dangers to the consumer. One such danger is the misuse of personal and financial information. Indeed, each time that a consumer makes an online purchase from a vendor over the World Wide Web (hereafter "Web"), he or she typically must supply the vendor with personal information, such as his or her name, address, telephone numbers, email address and financial information such as a credit card number, for example. Often the consumer is also invited to supply other information, such as annual income, number of dependents, etc. Such information tends to be persistent, and is usually stored in databases (whether such database belong to the vendor, credit agencies or other vendors) and may be used for purposes wholly unforeseen by the customer at the time of the original transaction. Individual consumers are not the only ones that may be harmed by such practices; businesses also have an interest in protecting their business information, be it customer lists, key suppliers and the like.

Even if the online purchase, however, is somehow made in an anonymous or quasi-anonymous fashion (that is, without divulging personal or financial information to the vendor), the vendor typically must still ship the package to a delivery address, which may be the purchaser's home or business address or the address of a customer, friend or relative. This information, then, must be given to the vendor who then may store the supplied information for later use or misuse.

Some of the potential consequences of providing such addressee information to the vendor are discussed with reference to Fig. 1, which shows a conventional method of shipping goods from a vendor to a customer. As shown therein, the customer makes an electronic purchase at S11, and is invited to provide the vendor with his or her personal and financial information, such as payment information (credit card numbers, for example) and personal information such as telephone numbers, physical and/or electronic addresses (email address, for example) and shipping information, as shown at S13. At step S14, the vendor processes and stores the supplied information (typically in a database, as shown at reference numeral 10 in Fig. 1). The vendor then packages the goods purchased by the customer, applies a shipping label to the package and surrenders the package to a shipper or freight forwarder (such as the US post office, UPS® or FedEx®, for example) for delivery to the customer 12.

However, the effects of supplying the vendor with the above-listed personal and financial information are not confined to the underlying purchase. Indeed, as shown in Fig. 1, the vendor may itself send the customer 12 unwanted email, subject the customer 12 to unwanted telephone solicitations, or send the customer unsolicited commercial mailings (commonly referred to as "junk mail"). More egregious still, the vendor may sell the customer-provided information to third parties, collectively referenced in Fig. 1 at 14. The vendor may also sell aggregate customer information – that is, information that does not identify any particular one customer, a relatively

benign act. However, the vendor may also sell his or her customers' individual personal and financial information to third parties 14, without the consent or knowledge of the affected customers. In turn, such third parties 14 may also subject the customer 12 to a barrage of unwanted emails, solicitations and/or junk mail. The customer, if a business, may have business
5 reasons such as the preservation of trade secrets, for wanting anonymous shipping. Such unwelcome intrusions are, however, but a few manifestations of the universe of all possible deliberate uses and misuses of personal and financial information. Indeed, the customer's personal and financial information may be purchased or intercepted by parties wholly unforeseen by the customer and used for illegal purposes, such as to facilitate identity theft, for example. This
10 problem is exacerbated by the increasing proliferation of e-commerce vendors and Web sites, each of which collects and uses the customers' personal and financial information.

However, even if the actual purchase is somehow made in an anonymous or quasi-anonymous fashion (akin to a face-to-face cash transaction, for example), the package containing the purchased goods still must be delivered to the customer or other addressee. In turn, this entails
15 that the name and address of the recipient of the package be provided to the vendor, with all of the above-detailed potential consequences of providing such information.

SUMMARY OF THE INVENTION

An object of the present invention, therefore, is to provide methods and systems for anonymous shipment of goods. Another object of the present invention is to provide methods and
20 systems for vendors, shippers and trusted parties such as banks to handle anonymous shipments of goods. It is a still further object of the present invention to provide methods and systems for the anonymous forwarding of goods in digital form, such as software and music.

In accordance with the above-described objects and those that will be mentioned and will become apparent below, a method of enabling anonymous shipment of a package containing goods purchased by a customer from a vendor for delivery to an address unknown to the vendor, comprises steps of receiving a request for a package code for the package from the vendor; sending
5 the package code to the vendor, the package code being devoid of delivery address information and sending a shipping identifier and an associated address to the shipper. The shipper, after picking up the package for shipment from the vendor, matches the package code sent to the vendor with the shipping identifier and identifies the associated address as the delivery address of the package. The package code may include a code number and machine-readable indicia expressing the code
10 number. The received request may include a request for authentication and/or an electronic draft for payment of the purchased goods and/or a shipping charge. The receiving and sending steps may be performed over a computer network, including leased lines, a private network, a virtual private network and/or the Internet. The receiving and sending steps may be carried out by a bank or other trusted party.

15 According to another embodiment thereof, the present invention is a method of processing a package identified by a package code devoid of delivery address information, the package containing goods purchased by a customer from a vendor for shipment to an address unknown to the vendor, comprising steps of receiving a request to pick up a package from the vendor, the package having a machine-readable package code affixed thereto, the request including a shipping
20 identifier and a delivery address associated with the shipping identifier; picking up the package from the vendor; reading the package code affixed to the package; matching the package code with the received shipping identifier, and delivering the package to the delivery address associated with the shipping identifier.

Steps of printing a shipping label on which the delivery address is visible and affixing the shipping label on the package may also be carried out. The package code may include a code number and/or machine-readable indicia expressing the code number. The receiving step may be performed over a computer network that includes, for example, leased lines, a private network, a virtual private network and/or the Internet. The request may be sent to the shipper by a bank or by some other trusted party.

According to still another embodiment, the present invention is a method of causing a package of goods purchased from a vendor to be delivered to an address unknown to the vendor, comprising steps of sending a request for a package code to a trusted entity; receiving the package code, the package code being devoid of delivery address information; affixing the package code to the package, and surrendering the package to a shipper. The shipper then matches the package code with a shipping identifier and associated delivery address previously received from the trusted entity, generates a shipping label specifying the associated delivery address and affixes the label to the package. The package code may include a code number and/or machine-readable indicia expressing the code number. The request may include a request for authentication and/or an electronic draft for payment of the purchased goods and/or a shipping charge. The receiving and sending steps may be performed over a computer network. The trusted entity may be a bank, for example.

The present invention may also be viewed as a method of enabling a customer to anonymously purchase an item from a vendor via an electronic draft for delivery to an address without divulging the delivery address to the vendor, comprising the steps of storing, in a bank, an encrypted unique identifier for the customer, the encrypted unique identifier being linked to the customer's personal and financial information stored in the bank, including the delivery address;

authenticating the customer having caused a draft to be executed for payment of at least one of a purchase price of the item and a shipping cost by encrypting at least a portion of an identification data provided by the customer and successfully matching the encrypted identification data with the stored encrypted unique identifier; retrieving at least the authenticated customer's financial information and delivery address; honoring a draft presented by the vendor for payment of the item only when the customer is successfully authenticated by the bank; assigning a package code to the item, the assigned package code being associated with the retrieved delivery address; sending only the package code to the vendor, the vendor affixing the package code to the package, and sending the package code and the associated delivery address to a shipper for storage in a shipper database.

10 The shipper then picks up the item from the vendor, and prints out a shipping label for the package, a delivery address on the label being that customer address linked to a package code stored in the shipper database that matches the package code affixed to the package.

The identification data may include an ID and a password, biometric data and/or a digital certificate at the bank's discretion, as required for appropriate security, given the value of the transaction. The password is preferably known to the bank only in encrypted form. The customer's encrypted unique identifier, personal and financial information may be stored in a data structure managed by a Directory software controlled by the bank. The package code and the linked customer address may be replicated in the shipper database via Light Weight Directory Access Protocol (LDAP) or similar standard format. At least a portion of the shipper database may be replicated in a portable electronic device equipped with a package code scanner and a shipping label printer. The package code may include a code number and/or a machine-readable indicia expressing the code number. The authenticating and sending steps may be performed over a computer network including, for example, the Internet.

According to still another embodiment, the present invention is a method of enabling a customer having purchased goods in digital form from a vendor to have the goods delivered to a specified electronic delivery address without divulging the electronic delivery address to the vendor, comprising the steps of associating a package code with the specified electronic delivery address and storing the package code and the electronic delivery address; sending the vendor a package code and an associated forwarding electronic address, the forwarding electronic address being different from the electronic delivery address, the vendor forwarding the goods and the package code to the forwarding electronic address associated with the received package code; reading the forwarded package code and retrieving the stored electronic delivery address associated therewith, and delivering the goods to the retrieved electronic delivery address. The associating and storing steps may be carried out by a bank or other trusted entity.

BRIEF DESCRIPTION OF THE DRAWINGS

For a further understanding of the objects and advantages of the present invention, reference should be made to the following detailed description, taken in conjunction with the accompanying figures, in which:

Fig. 1 is a flowchart of a conventional method of shipping goods from a vendor to a customer.

Fig. 2 is a flowchart of eDROPSHIP™, a method for anonymous shipping according to an embodiment of the present invention.

Fig. 3 shows another aspect of the present invention, in which the transaction between the vendor and the customer includes both anonymous payment and shipment.

DESCRIPTION OF THE INVENTION

DEFINITIONS

VENDOR: Any person or entity that sells and/or offers goods and/or services for Sale (the seller).

CUSTOMER: Any person or entity that purchases goods and/or services from a Vendor (the buyer). The customer may be a business who, for business, privacy, or business reasons (such as the preservation of trade secrets, for example) may want to purchase and receive goods anonymously.

DELIVERY ADDRESS: A location to which the package is to be delivered. The delivery address may be a physical location to which a physical package may be delivered or may be an electronic address over a computer network such as the Internet.

SHIPPER: Any person or entity that ships or forwards the purchased goods and/or services to the delivery address.

PACKAGE: Any package that contains the goods or item(s) purchased by purchaser that is to be delivered by the shipper to the delivery address. The package may be in any form, such as a letter or package. The package may also be large, such as a Sea-Land® container or a railroad boxcar, for example. Alternatively, the package may be in electronic form and may include one or more electronic files to be delivered to an electronic address.

BANK: As used herein, the term “bank” includes all financial services institutions accepting deposits of cash, negotiable securities, marketable shares/stock into numbered (or otherwise uniquely-identified) accounts and honoring checks, drafts and/or other customer instructions. Such a definition includes (but is not limited to) traditional banks and savings institutions, stockbrokers, online

trading concerns, credit unions and any institution that legally identifies with and has some financial and fiduciary relationship with an account holder and that has the ability to honor customer or account holder instructions referring to specific accounts. Within the context of the present invention, the term “bank” also includes such institutions as post offices or other governmental agencies that carry out banking or quasi-banking functions.

FUNCTIONAL OVERVIEW

Fig. 2 is a flowchart of the eDROPSHIP™ method for anonymous shipping, according to an embodiment of the present invention. The method begins at step S20. At S21, the customer makes a purchase from, for example, the vendor’s Web site. At step S22, the customer requests anonymous payment (anonymous with respect at least to the vendor) for his or her purchase through his or her bank 20. Although any means and/or methods for anonymous payment may be implemented within the context of the present invention, particularly well-suited methods and means for doing so are disclosed in commonly assigned US patent applications serial numbers 09/272,056 filed March 18, 1999 and 09/405,741 filed September 24, 1999, the disclosures of which are hereby incorporated herein in their entirety. It is to be noted that the present invention also finds applicability in situations wherein the payment is not anonymous, but the customer does not wish to disclose the identity or address of the recipient of the package to the vendor and to any situation in which the customer wishes to keep the address of the package recipient from the vendor. The present invention is also applicable to in-person cash transactions.

According to the present invention, the only entity that should hold the customer’s personal and confidential information is that entity that already enjoys a fiduciary relationship and a trusted relationship with the customer. According to an embodiment of the present invention, that entity is the customer’s bank 20. The bank 20 is well suited to intermediate in electronic transactions, as it

already stores the customer's financial and personal information in its secure database(s).

According to the present invention, the bank 20 restricts access to the customers' personal and financial information, such as account numbers, credit card numbers, passwords, address, phone numbers and the like. As shown at S23, the bank 20 processes the request for anonymous payment

5 for the goods purchased by the customer. For example, the request for anonymous payment may be in the form of an electronic draft. Using generally accepted legal terms, a draft is a written order by a first party, called the drawer, instructing a second party, called the drawee, to pay money to a third party, called the payee. In terms of the present invention, the vendor may be thought of as the payee, the customer as the drawer and the bank may be thought of as the drawee.

10 In step S24, the bank 20 authorizes, guarantees and/or releases payment (on the electronic draft, for example) to the vendor for the goods (and/or the shipping charges) purchased by the customer.

Along with or separately from the authorization, guarantee and/or electronic payment, the bank 20 sends a package code through the network 22 to the vendor, as shown in step S24. Preferably, the package code sent to the vendor includes a code number and machine-readable indicia expressing the code number. The code number may be an entirely numerical code number or may include other symbols and/or letters. According to an embodiment of the present invention, the machine-readable indicia includes a barcode. Other machine-readable indicia may be used within the context of the present invention. Examples of suitable machine-readable codes include the PDF code developed by Symbol Technologies, Inc. and the DataGlyph code developed by Xerox, Inc.

15 20 The PDF code is a two-dimensional code that is used for the identification of fungible items, and is read using a handheld laser beam scanning technique. The DataGlyph code is a two-dimensional code disclosed in US patent no. 5,245,165 and is used to provide information on office forms that are scanned using a conventional general-purpose document reader.

According to an embodiment of the present invention, the package code is entirely devoid of any package delivery information. Alternatively, the package code includes the delivery address, but in a form that is unreadable by the vendor. In any event, the vendor is not given access to the package delivery address, and thus cannot misuse the information or include such information in any later (even legitimate) marketing or sales efforts. Having received the package code from the bank 20, the vendor affixes or somehow otherwise imprints the package code on the package to be shipped. According to one embodiment of the present invention, the vendor affixes an adhesive label onto the package, the adhesive label bearing the package code thereon. For example, the vendor may affix a label onto the package to be shipped, the label having the machine-readable indicia such as a barcode, PDF, DataGlyph or other code printed thereon. The bank 20, as shown at S25, also sends a shipping identifier and an associated delivery address through the network 22 to a shipper such as, for example, the United States Postal Service or any private shipping or freight company, such as FedEx®, UPS® or DHL® for example. The bank 20 retrieves this information from its secure database and sends the shipping identifier and associated delivery address through a secure communication channel using a standardized protocol, such as the Secure Socket Layer (hereafter “SSL”), for example. SSL utilizes an encryption scheme (such as a public key encryption scheme, for example) negotiated at the time of the communication and helps to ensure that electronic eavesdroppers between the shipper and the bank 20 cannot intercept any clear, unencrypted communication.

The shipper to which the shipping identifier and the associated package delivery address are sent may be selected by the customer or by the bank 20. The shipping identifier sent to the selected shipper matches the package code sent to the vendor. The shipper stores the shipping identifier and the associated delivery address. As shown at S26, the shipper then picks up the

package at the vendor's location, reads the package code, matches the read package code with the received shipping identifier and prints out a shipping label bearing the associated package delivery address thereon and affixes same to the package. In this manner, only the shipper and the bank know and/or have access to the delivery address. As shown in step S27, the shipper may now ship the package to the address on the shipping label in the usual manner. The shipped package may then be received at the intended delivery address, as shown at step S28, whereupon the method according to the present invention ends at S29.

In practice, the bank 20 may send the vendor an estimate of when the shipper will pick up the package, along with the package code. When the bank 20 sends the shipper the shipping identifier and associated delivery address, as shown in step S25, the bank 20 preferably also sends the shipper the vendor's name, address and contact information, such as telephone number(s), facsimile number(s) and email address, for example. The bank 20 may also send the shipper the customer's telephone number or other contact information. This information may be sent to the shipper's database and thereafter replicated or otherwise downloaded into a portable digital device, such as a Palm Computing device, as manufactured/modified by Symbol Technologies, Inc., for example. Such a device may store a subset of the shipper's main database. For example, an Oracle 8i Lite database may reside on the portable digital device and the subset of the shipper's main database may be replicated wirelessly into the portable digital device. In such a case, the above-listed information may be replicated therein, to allow the shipper to make the pick up and match the package code on the package with the shipping identifier and associated delivery address stored in the database (Oracle 8i Lite, for example, or a later version or incarnation thereof). Preferably, the portable digital device includes an integrated code reader device for reading the machine-readable indicia affixed to the package and a printer for printing out a shipping label, or

the relevant portion thereof containing the package delivery address. Upon reading the machine-readable indicia affixed by the vendor on the package to be delivered, the database residing on the portable digital device then matches the package code embodied in the machine-readable indicia with the shipping identifier and associated delivery address (including the name of the recipient of the package, if appropriate) stored therein. The retrieved delivery address is then passed to the printer of or coupled to the portable digital device, which then prints the shipping label. The shipper may then affix the shipping label to the package and the shipping and actual delivery of the package may then proceed in the usual manner.

The methods and systems for anonymous shipment according to the present invention may also be utilized for shipping packages to addresses other than the address of the bank account holder. For example, the package may be “in care of” the bank account holder, but addressed to another person at another address. In that case, the bank account holder may store the “Care of” address within the bank database and specify that the “Care of” address is to be substituted for the delivery address in step S25. This may be done when the electronic draft is created and forwarded to the bank 20 for payment or upon otherwise arranging for a bank-intermediated payment or financing. Alternatively, the package may be a gift, or may have been bought on behalf of a person other than the bank account holder. In this case, the bank account holder may have caused a “Send to” address to be stored within the bank database, and the “Send to” address may be selected by the customer upon causing the electronic draft to be created and forwarded to the bank 20, or upon otherwise arranging for a bank-intermediated payment or financing. In the case wherein a package is undeliverable for any reason, the shipper may return the package to the bank 20 or to some location specified by the bank 20. Thereafter, the bank 20 may generate a message (such as an email, for example) informing the customer that his or her package is undeliverable. A

charge may be levied against the customer's account to cover the costs associated with shipping and storing an undeliverable package.

The present invention, therefore, provides for an anonymous shipment system and method by which the customer's personal and financial information is safeguarded by entities having a fiduciary and/or contractual agreement to limit the dissemination of such information. For example, the shipper may be under a contractual obligation with the bank 20 not to make any disclosure of the personal and/or financial information gained through participation in the method or use of the system disclosed herein. Preferably, the bank 20 may only sell aggregate customer information to third parties, unless the customer has previously given the bank 20 his or her (full or limited) consent to the dissemination of his or her confidential information. The vendor, therefore, may purchase aggregate information (i.e., information that does not identify any one customer) for use in sales and/or marketing efforts, for example. The aggregate customer information may be filtered and sorted by the bank 20 to provide the vendors only with that information that they have requested, and only in the form in which they have requested the information. The vendor's sales and marketing informational needs are satisfied, therefore, without subjecting the customer to unwanted solicitations and intrusions into their privacy.

Should, however, the vendor wish to contact the customer to notify the customer of a product recall or to send the customer advertisement and special promotions, the vendor may send same electronically to the bank 20, including therein the package code sent to in step S24. The bank 20 may then forward the electronic recall, advertisement or promotion to the customer's physical or electronic address (e.g., email address), unless the customer bank account holder has previously indicated his or her preference not to receive any such messages or messages from this vendor, excepting, for example, product safety and recall information. Therefore, the vendor's link

to the customer is not necessarily severed, but is managed and under the control of the customer, which is the party bearing the risk of loss in the case of uncontrolled dissemination of personal information. Implementation of the present method and system eventually recaptures the customers' confidentiality, as the vendors' databases will no longer be updated as the customers' personal and financial information changes. Instead, only the bank 20 and the shipper, both under a duty to preserve the confidentiality of the customers' information, will have access thereto.

The bank 20, according to the present invention, may guarantee that the shipper's charges will be paid. Indeed, the shipper may be paid directly from the account holder's account. In this manner, the vendor preferably only charges for the cost of the item and not for any related (and oft inflated) "shipping and handling" charges.

In the case wherein the goods purchased by the customer from the vendor are in electronic form, such as software, music or data, the bank 20 may send the vendor a package code and an electronic forwarding address to which to forward the customer's purchase. The vendor may then transmit the software, music or data to the specified electronic forwarding address, together with the supplied package code. The bank 20 may then match the package code with the customer's account(s) and cause the software, music, or other digital data purchased by the customer to the customer's own electronic address, to the customer's "Care of" electronic address or to the customer's "Send to" electronic address, as specified by the customer upon purchasing the item and arranging for its payment, whether anonymous or otherwise. The customer may modify his or her payment information, physical address(es), electronic address(es), "Care of" address(es), "Send to" address(es) or any other delivery address(es) at any time by logging onto a secure Web site maintained and controlled by the bank 20, becoming authenticated by the bank 20 by means of an

ID/Password pair (for example), and entering/modifying the desired information by clicking a “Shipping Options” selection, for example.

Fig. 3 shows another aspect of the present invention, in which the transaction between the vendor and the customer includes both anonymous payment and shipment. As shown therein, a method of enabling a customer to anonymously purchase an item from a vendor via an electronic draft for delivery to an address without divulging the delivery address to the vendor may include the following steps. At step S31, an encrypted identifier unique to the customer is stored in a bank, or other trusted entity. The encrypted unique identifier is linked to the customer’s personal and financial information stored in the bank, including the delivery address (or one or more “Send to” addresses and/or one or more “Care of” addresses). The delivery address may be the customer’s own home or business address, or someone else home or business address. In step S32, it is determined whether the customer has been authenticated by the bank. To do so, the customer may log onto the bank’s Web site set up for that purpose, as disclosed in above-cited US patent applications 09/272,056 and/or 09/405,741. The bank-buyer agreement will define the appropriate authentication measures. Once logged on over the network 22 (which may, for example, include the Internet), the customer provides the bank 20 with identification data, at least a portion of which may be immediately encrypted and compared with the previously stored encrypted unique identifier for that customer. Upon a successful match, the customer is authenticated. If the identification data provided does not match the stored encrypted unique identifier, the customer is not authenticated and no electronic draft will be honored on the customer’s account (until such authentication is successful), as shown at S33. At S34, the bank 20 or other trusted party retrieves the stored customer’s personal and/or financial information linked to the encrypted unique identifier. At step S35, the electronic draft presented to the bank 20 for payment of the customer’s

purchases is honored, subject to any bank-imposed restrictions, such as sufficient account balances or credit, for example. The bank 20 may then assign a package code to the item(s) purchased by the customer and send the package code (preferably electronically) to the vendor. The vendor may then affix a machine-readable indicia expressing the package code to the package. As shown at 5 S38, the package code and the package delivery address may be sent to the shipper, along with an identification of the vendor and other relevant information. In a preferred embodiment, the shipper maintains an iDRAFT™ account at a participating iDRAFT™ bank, in the manner disclosed in the above cited US patent applications serial numbers 09/272,056 and/or 09/405,741. The shipper may then pick up the package identified by the package code, read the machine-readable indicia 10 affixed thereto, retrieve the delivery address associated therewith, print out a shipping label and affix same to the package.

The customer's identification data may include an ID and a password and/or other identifying data, such as biometric data, for example. As the customer's password is known to the bank 20 only in encrypted form, the bank 20 preferably encrypts the customer-provided password immediately upon receipt. Preferably, the customer's encrypted unique identifier, personal and financial information are stored by the bank 20 or other trusted entity in a data structure managed by a Directory software controlled by the bank. Directory software typically includes a repository (e.g., a list or database, for example) of names, permissions, resources, hardware, software and hierarchical information and/or rules within a network. The phrase "Directory software", 20 according to the present invention, encompasses any software including or managing such a repository that is designed to operate on computers coupled to a network. For example, the bank 20 may store the above-listed information in a Directory software compatible with and accessible through Directory access software, such as Directory access software compatible with the X.500

Directory Access Protocol (DAP), which protocol is incorporated herein by reference, or a subset, extension or variant thereof. One such subset of DAP is the Lightweight Directory Access Protocol or LDAP. For example, the customer's bank 20 may implement Oracle Internet Directory™ (OiD™) software (or upgrades/variants thereof), a software product developed by the assignee of the present invention. OiD™ combines a native implementation of the Internet Engineering Task Force's (IETF) LDAP v3 standard (also incorporated herewith in its entirety by reference) with, for example, an Oracle8 (or later implementation) back-end data store. In like manner, the shipper may store the package code and the delivery address provided to it by the bank 20 within a database managed by a Directory software compatible with the LDAP v3 (or later versions) protocol, such as the above-identified OiD™ software from Oracle Corporation. A portion of this database may be replicated (via the LDAP protocol, for example) in a portable digital device (such as the SPT1700 series of "Palm" computing devices manufactured/modified by Symbol Technologies, Inc., for example) in which an Oracle 8i Lite (or later versions thereof) database resides. This allows the shipper actually making the pick up of the package to have all relevant information available at the vendor's location when he or she picks up the package identified by the package code. Other Directory software may be used for this purpose, such as Novell Directory Services™ (NDS™) of Novell, Inc.

While the foregoing detailed description has described preferred embodiments of the present invention, it is to be understood that the above description is illustrative only and not limiting of the disclosed invention. Those of skill in this art will recognize other alternative embodiments and all such embodiments are deemed to fall within the scope of the present invention. Thus, the present invention should be limited only by the claims as set forth below.

WHAT IS CLAIMED IS:

1. A method of enabling anonymous shipment of a package containing goods purchased by a customer from a vendor for delivery to an address unknown to the vendor, comprising the steps of:

5 receiving a request for a package code for the package from the vendor;

sending the package code to the vendor, the package code being devoid of delivery address information and

10 sending a shipping identifier and an associated address to the shipper, whereby the shipper, after picking up the package for shipment from the vendor, matches the package code sent to the vendor with the shipping identifier and identifies the associated address as the delivery address of the package.

2. The method of Claim 1, wherein the package code includes at least one of a code number and machine-readable indicia expressing the code number.

3. The method of Claim 1, wherein the received request includes at least one of a request for authentication and an electronic draft for payment of at least one of the purchased goods and a shipping charge.

4. The method of Claim 1, wherein the receiving and sending steps are performed over a computer network.

5. The method of Claim 1, wherein the computer network includes at least one of
20 leased lines, a private network, a virtual private network and the Internet.

6. The method of Claim 1, wherein the receiving and sending steps are carried out by a bank.

7. A method of processing a package identified by a package code devoid of delivery address information, the package containing goods purchased by a customer from a vendor for shipment to an address unknown to the vendor, comprising the steps of:

receiving a request to pick up a package from the vendor, the package having a machine-readable package code affixed thereto, the request including a shipping identifier and a delivery address associated with the shipping identifier;

picking up the package from the vendor;

reading the package code affixed to the package;

matching the package code with the received shipping identifier, and

delivering the package to the delivery address associated with the shipping identifier.

8. The method of Claim 7, further comprising the steps of printing a shipping label on which the delivery address is visible and affixing the shipping label on the package.

9. The method of Claim 7, wherein the package code includes at least one of a code number and machine-readable indicia expressing the code number.

10. The method of Claim 7, wherein the receiving step is performed over a computer network.

11. The method of Claim 7, wherein the computer network includes at least one of leased lines, a private network, a virtual private network and the Internet.

12. The method of Claim 7, wherein the request is sent to the shipper by a bank.

13. A method of causing a package of goods purchased from a vendor to be delivered to an address unknown to the vendor, comprising the steps of:

sending a request for a package code to a trusted entity;

receiving the package code, the package code being devoid of delivery address information;

affixing the package code to the package, and

5 surrendering the package to a shipper, whereby the shipper matches the package code with a shipping identifier and associated delivery address previously received from the trusted entity, generates a shipping label specifying the associated delivery address and affixes the label to the package.

10 14. The method of Claim 13, wherein the package code includes at least one of a code number and machine-readable indicia expressing the code number.

15 15. The method of Claim 13, wherein the request includes at least one of a request for authentication and an electronic draft for payment of at least one of the purchased goods and a shipping charge.

15 16. The method of Claim 13, wherein the receiving and sending steps are performed over a computer network.

17. The method of Claim 13, wherein the trusted entity is a bank.

18. A method of enabling a customer to anonymously purchase an item from a vendor via an electronic draft for delivery to an address without divulging the delivery address to the vendor, comprising the steps of:

20 storing, in a bank, an encrypted unique identifier for the customer, the encrypted unique identifier being linked to the customer's personal and financial information stored in the bank, including the delivery address;

authenticating the customer having caused a draft to be executed for payment of at least one of a purchase price of the item and a shipping cost by encrypting at least a portion of an identification data provided by the customer and successfully matching the encrypted identification data with the stored encrypted unique identifier;

5 retrieving at least the authenticated customer's financial information and delivery address;

honoring a draft presented by the vendor for payment of the item only when the customer is successfully authenticated by the bank;

assigning a package code to the item, the assigned package code being associated with the retrieved delivery address;

10 sending only the package code to the vendor, the vendor affixing the package code to the package, and

15 sending the package code and the associated delivery address to a shipper for storage in a shipper database, whereby the shipper picks up the item from the vendor, and prints out a shipping label for the package, a delivery address on the label being that customer address linked to a package code stored in the shipper database that matches the package code affixed to the package.

19. The method of Claim 18, wherein the identification data includes at least one of an ID and a password, the password being known to the bank only in encrypted form, biometric data and a digital certificate.

20 20. The method of Claim 18, wherein the customer's encrypted unique identifier, personal and financial information are stored in a data structure managed by a Directory software controlled by the bank.

21. The method of Claim 18, wherein the package code and the linked customer address are replicated in the shipper database via Light Weight Directory Access Protocol (LDAP) or similar standard format.

22. The method of Claim 18, wherein at least a portion of the shipper database is replicated in a portable electronic device equipped with a package code scanner and a shipping label printer.

23. The method of Claim 18, wherein the package code includes at least one of a code number and machine-readable indicia expressing the code number.

24. The method of Claim 18, wherein the authenticating and sending steps are performed over a computer network.

25. The method of Claim 24, wherein the computer network includes the Internet.

26. The method of Claim 18, wherein the customer is a business.

27. A method of enabling a customer having purchased goods in digital form from a vendor to have the goods delivered to a specified electronic delivery address without divulging the electronic delivery address to the vendor, comprising the steps of:

associating a package code with the specified electronic delivery address and storing the package code and the electronic delivery address;

sending the vendor a package code and an associated forwarding electronic address, the forwarding electronic address being different from the electronic delivery address, the vendor forwarding the goods and the package code to the forwarding electronic address associated with the received package code;

reading the forwarded package code and retrieving the stored electronic delivery address
associated therewith, and

delivering the goods to the retrieved electronic delivery address.

28. The method of claim 27, wherein the associating and storing steps are carried out by

5 a bank.

ABSTRACT OF THE DISCLOSURE

A method of enabling anonymous shipment of a package containing goods purchased by a customer from a vendor for delivery to an address unknown to the vendor includes steps of receiving a request for a package code for the package from the vendor, sending the package code to the vendor, the package code being devoid of delivery address information and sending a shipping identifier and an associated address to the shipper. The shipper, after picking up the package for shipment from the vendor, matches the package code sent to the vendor with the shipping identifier and identifies the associated address as the delivery address of the package. A shipping label may then be printed out and affixed to the package.

FIG. 1
(Prior Art)

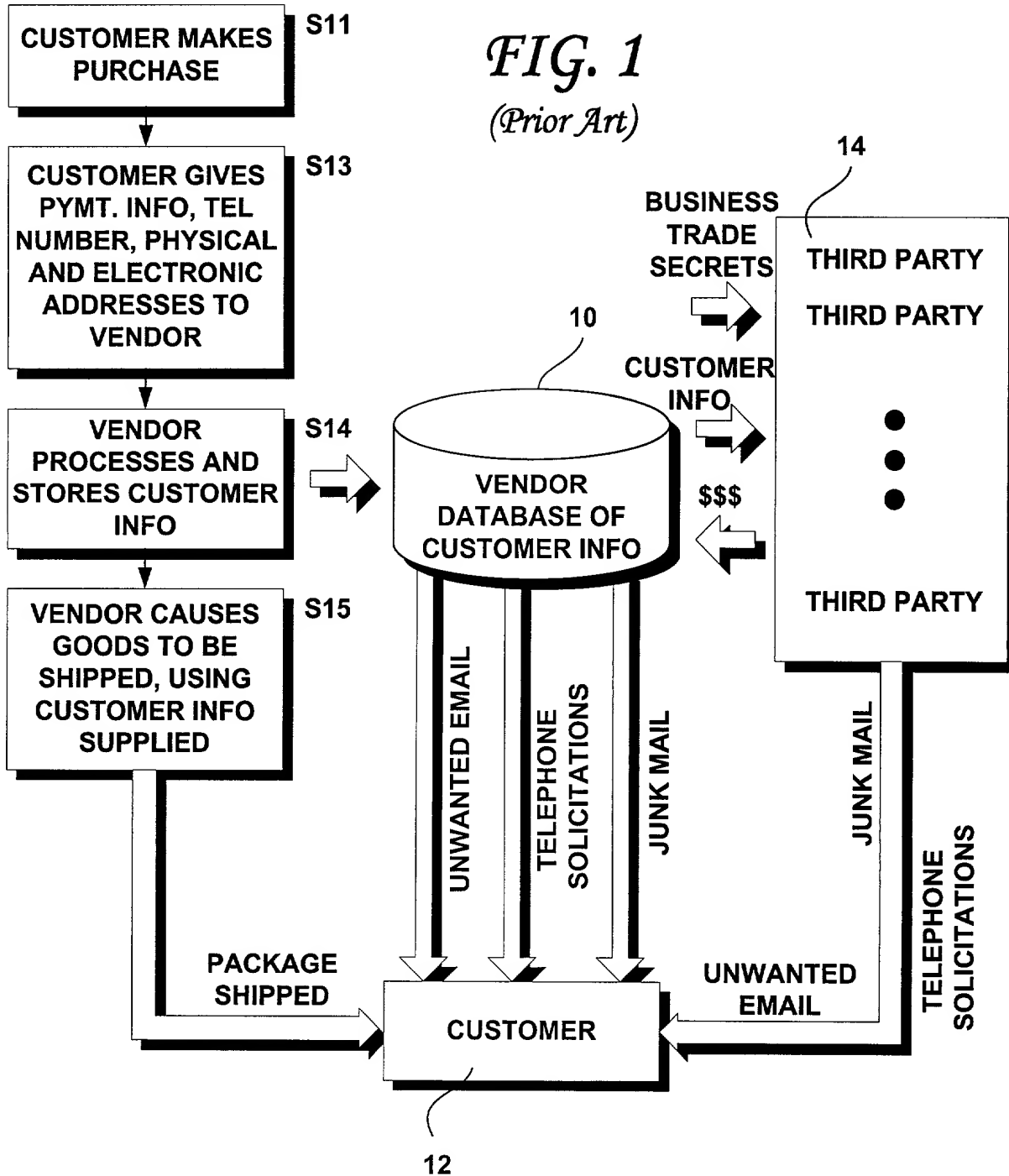
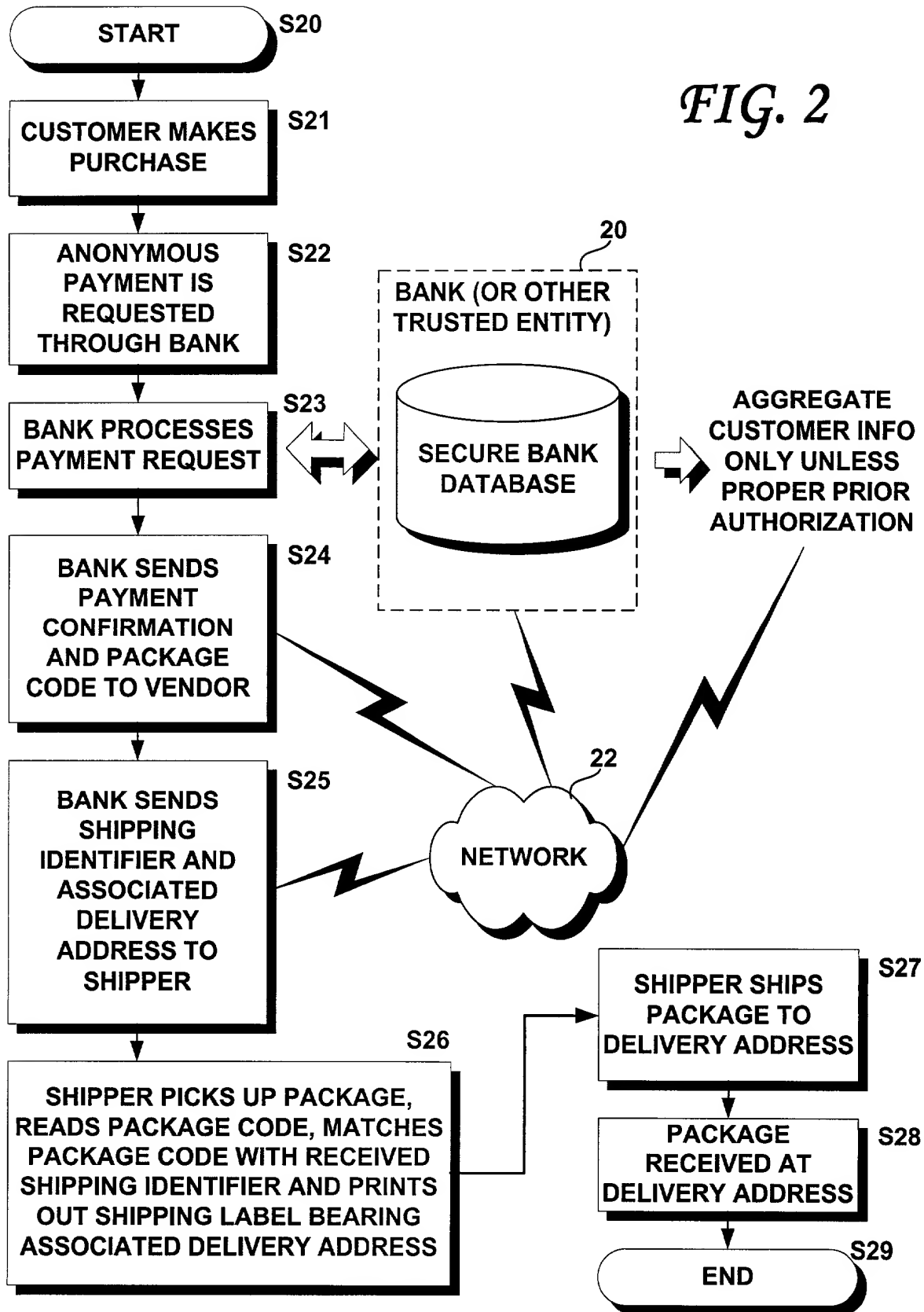


FIG. 2



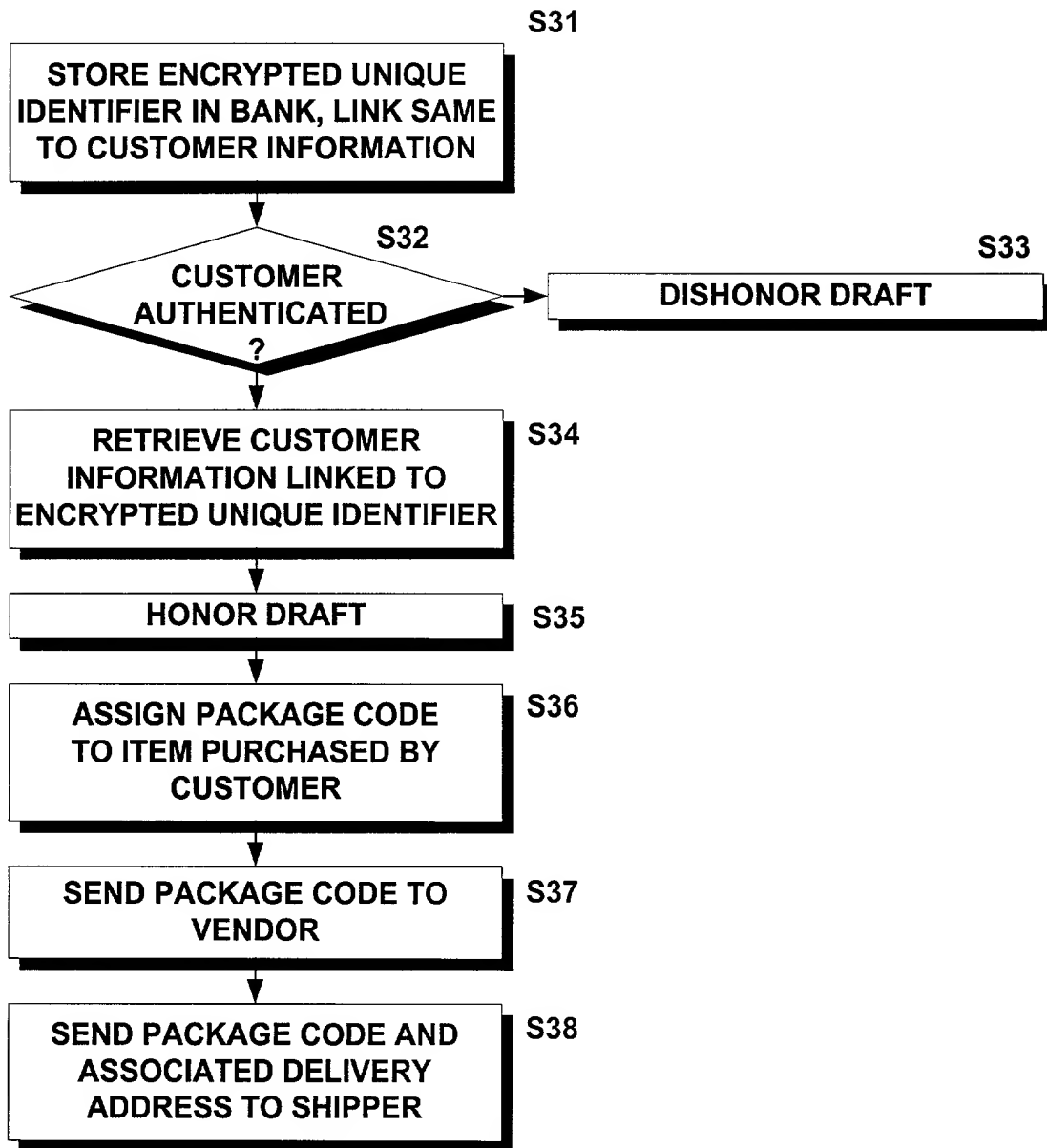


FIG. 3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

DECLARATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if more than one name is listed below) of the subject matter that is claimed and for which a patent is sought on the invention entitled:

eDROPSHIP: METHODS AND SYSTEMS FOR ANONYMOUS eCOMMERCE SHIPMENT

the specification of which: *(check one)*

- ☒ REGULAR
- ☐ DESIGN APPLICATION
- ☒ is attached hereto.
- ☐ was filed on _____ as application Serial No. _____ and was amended on _____ (if applicable).
- ☐ was described and claimed in International application No. _____ filed on _____ and as amended on _____ (if any).

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understood the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information

- ☒ Which is material to patentability as defined in 37, Code of Federal Regulations, § 1.56
- ☒ and which is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent, and
- ☒ In compliance with this duty there is attached an information disclosure statement in accordance with 37 CFR 1.98.

PRIORITY CLAIM

☐ I hereby claim foreign priority benefits under 35 USC 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

PRIOR FOREIGN APPLICATION(S)

Country	Application Number	Date of Filing (day, month, year)	Priority Claimed

(Complete this part only if this is a continuing application.)

☐ I hereby claim the benefit under 35 USC 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 USC 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 Code of Federal Regulations §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No. :

Filing Date :

Status-patented, pending, abandoned: _____

☐ I hereby claim benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below:

Application Serial No. :

Filing Date :

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of inventor: JOHNSON, Richard C.
(Family name, given name)

Inventor's signature:

Richard C. Johnson

Date:

1/14/2000

Residence:

7542 Shadowhill Lane,
Cupertino, CA 95014 USA

Citizenship:

USA

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404
--	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: JOHNSON, Richard C. Art Unit No.: To Be Assigned
Serial Number: To Be Assigned Examiner: To Be Assigned
Filing Date: To Be Assigned Att'y Docket: ORCL5628
Title: eDROPSHIP: METHODS AND SYSTEMS
FOR ANONYMOUS eCOMMERCE SHIPMENT

POWER OF ATTORNEY AND REVOCATION OF PREVIOUS POWERS

Hon. Assistant Commissioner for Patents,
United States Patent and Trademark Office
Washington, DC 20231

Sir:

Oracle Corporation, a Delaware corporation having a place of business at 500 Oracle Parkway, Redwood Shores, CA 94065, certifies that to the best of its knowledge and belief it is the assignee or is entitled to ownership of the entire right, title, and interest in and to the above-referenced patent application by virtue of an Assignment filed concurrently herewith and represents that the undersigned is a representative authorized and empowered to sign on behalf of Oracle Corporation, which hereby revokes all powers of attorney previously given and appoints the following attorneys: **SANJAY PRASAD, Reg. No. 36,247** c/o ORACLE CORPORATION and **ALAN W. YOUNG, Reg. No. 37,970**, c/o YOUNG LAW FIRM, P.C., 4370 Alpine Road, Suite 106, Portola Valley CA 94028 with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Address all communications to **Alan W. Young** at

YOUNG LAW FIRM, P.C.
4370 Alpine Road, Suite 106
Portola Valley, CA 94028
Tel: (650) 851-7210
Fax (650) 852-7232
alan@younglawfirm.com

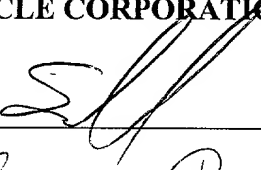
Assignee of Interest: **ORACLE CORPORATION**

Signature: _____

Typed Or
Printed Name: _____

Title: _____

Dated: _____



Sanjay Prasad

Chief Patent Counsel

January 17, 2000

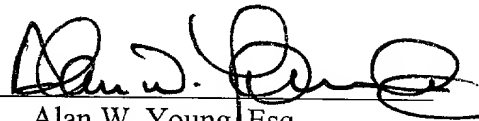
F:\PATENT OPS\EMAIL\POA5628.doc
Oracle Ref. OID-1999-152-01
YLF Ref: ORCL5628

Address of Assignee of Interest:

ORACLE CORPORATION
500 Oracle Parkway
Redwood Shores, CA 94065

Respectfully submitted,
YOUNG LAW FIRM, P.C.

By:



Alan W. Young, Esq.

Attorney for Applicants

Registration No. 37,970

4370 Alpine Road, Suite 106

Portola Valley, CA 94028

Telephone: (650) 851-7210

Facsimile: (650) 851-7232

Email: alan@younglawfirm.com

Date: Jan 24, 2000